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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,800

06/25/2007

David J. Gibson

ICC-297/PCT/US

6499

31217 7590
Loctite Corporation
One Henkel Way
Rocky Hill, CT 06067

01/19/2011

EXAMINER

BAINBRIDGE, ANDREW PHILIP

ART UNIT

PAPER NUMBER

3754

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,800	Applicant(s) GIBSON ET AL.	
	Examiner ANDREW BAINBRIDGE	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-20,22-24,26-38 and 40-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-20,22-24,26-38 and 40-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/25/2010 has been entered.

Claim Objections

2. Claims 6-9, 22 and 24 are objected to because of the following informalities: Each of these claims depend to a cancelled claim. It appears to the Examiner that claims 6-9 should depend from claim 1, and that claims 22 and 24 should depend from claim 19. For the sake of Examination efficiency, the claims were treated as such. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6-9 recite the limitation "a nozzle according to claim 2" in line 1 of each claim. There is insufficient antecedent basis for this limitation in the claim.

5. Claims 22 and 24 recite the limitation "a nozzle according to claim 21" in line 1 of each claim. There is insufficient antecedent basis for this limitation in the claim.

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6. Claims 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether the “first and second ramps” are the two ramps of a given set of ramps, and if so, which ones.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. **Claims 1, 4-16, 18-54 are rejected under 35 U.S.C. 103(a)** as being unpatentable over US 5,397,927, Montenieri et al., (Montenieri)., and further in view of US 5,213,225, King et al., (King).

In Reference to Claims 1 and 9-12, 23

Montenieri discloses:

A dispensing nozzle (20, 25, 35, see figure 5) comprising:

(i) an elongate nozzle body (20) having a longitudinal axis and a base portion (35) and a dispensing end (24-25);

(ii) an internal conduit in the nozzle body (25, 40, see figure 10, near the top) for delivering product (cyanoacrylates, col. 1, ll. 5-15) from the base portion (35) to the dispensing end (24-25);

(iii) engaging formations (28) on the nozzle (25) for inter-engaging with co-operating engaging formations (15, 59, see figure 11) on a cap (15), to hold said cap (15) in a position over-fitting the nozzle (25, col. 5, ll. 65-68, col. 6, ll. 1-25, which teaches that the cap 15 closes on the nozzle 25 by first positioning the cap 15 in an orientation so that the closing cap rotates down on the ramp 29, and then to secure the cap 15 to the nozzle 25, is rotated further in order for the horizontal stop 28 engages with the slot 59 in the cap 15); and

(iv) a first set of external ramps (29, 32, see figures 5-8, which show that there are two opposite ramps 29, 32), the ramps (29, 32) within the first set being spaced

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apart on the nozzle transversely relative to the longitudinal axis of the nozzle body (see figure 8) and

[(v) a second set of external ramps are provided longitudinally spaced apart from the first set of external ramps on the nozzle body, the ramps within the second set of ramps being transversely spaced apart on the nozzle relative to the longitudinal axis of the nozzle body and against each of which sets respective co-operating portions on the cap may act by relative rotation of the cap and the nozzle in at least one direction, to provide sufficient relative separation force

between the cap and the nozzle body, to separate the engaging formations on the cap and the nozzle from an inter-engaged position, wherein the first and second external ramps each comprise a ramping surface oblique to the direction of rotation of the cap.]

Montenieri does not teach but King does teach:

Montenieri has an arcuate line that appears to ramp up from the horizontal stop block (28) in figures 5-7, but the reference does not elaborate about the nature or operation of the arcuate line or ramp. King teaches in figures 1-12 a bottle (10) that has a shoulder (12) and a bottle neck (14) with an opening (35) and a removable cap (20) that has a skirt (21, 27), wherein the bottle (10) and the cap (20) has up to 4 matching sets of threads (24 on the cap 20, 15 on the bottle neck 14) that work in conjunction with a second set of external ramps (17, 18, 100, 102, see figure 11-12 for a more pronounced second ramp) located on the bottle's shoulder (12) and a series of locking ribs (28) that fit into the slot in the ramp (17-18, see figures 3-4, 11-12) that serves to prevent rotation once the rib (28) is in the slot (between 17-18), but allows rotation along

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the outside of the ramp (17-18) once it clears the slot. The King device has many threads for a reason: the intent was to create a bottle that had enough threads so that bottle could be opened easily by the elderly and the invalid without having to rotate the bottle excessively (col. 1, ll. 15-25, col. 6, ll. 65-68, col. 7, ll. 1-5). It is noted that the Montenieri device is designed to supply a very sticky product: cyanoacrylate, and so it follows that anything that can make opening the device easier would be welcome by an end user. It would be obvious to one of ordinary skill in the art to borrow the teaching of a set of threads on the bottle neck or nozzle stem and corresponding set of matching threads on a removable cap from King and replace the guide ribs (26) of Montenieri with a set of matching threads longitudinally above the horizontal stop (28) that of course do not interfere with the horizontal stop block 28 but provide additional ramps to make opening the Montenieri device easier.

In Reference to Claims 4-5

The Montenieri-King combination as presented in the rejection of claim 1 above has two sets of ramps (the set on Montenieri directly attached to the shoulder, and the set of ramps provided by King that replaced the guide ribs above the horizontal stop block) that together provide the separation force between the cap and the nozzle by the rotation of the one in relation of the other.

In Reference to Claims 6-8

The Montenieri-King combination has the ability to be opened by twisting no more than 30 degrees (col. 4, ll. 55-68), and of course the King threads would have their pitches modified to match the pitch of the Montenieri ramps.

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In Reference to Claims 13-14

The Montenieri-King combination has ramps that all have ramps with a higher and lower portion that create the axial separation between the cap and nozzle by moving the matching guide surface or matching thread from the lower to higher positions. The lower or first set of ramps (located below the horizontal stop block 28) meet one another at their lower ends that meld with the shoulder's upper surface (34, see figure 5).

In Reference to Claims 15-16

The Montenieri-King combination has a lower or first set of ramps that are curved around the longitudinal axis of the nozzle (25, 29, see figure 5) that follows the path of the cap (15) which project outwardly from the wall portion of the nozzle (25, see figure 5).

In Reference to Claims 18-20, 22 and 24

The Montenieri-King combination has a horizontal block (28) that is located between the first and second set of ramps, and is secured by twisting the cap onto the nozzle. King teaches that a stop block can be formed by placing a lug (28 between a slot formed on a ramp (17-18, 100, 102). Finally, Montenieri in figures 18-20 teaches an alternative embodiment that adds a set of nibs (45) on the shoulder (34-35) that fit into a set of corresponding spaces (70) in the cap (15). It would be obvious to one of ordinary skill in the art to provide a twist fit, a push fit, or a snap fit that is located between the first and second set of ramps because there are only a finite amount of

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ways to “fit” two parts together, and any particular one would be considered by a designer of glue dispensers.

In Reference to Claim 26

The Montenieri-King combination has a nozzle (25) with a ramp (29) that interacts with a longitudinal rib (55) that runs along the interior of the removable cap (15, 55).

In Reference to Claim 27

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claim 27.

In Reference to Claims 28-30

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claims 28-30.

In Reference to Claims 31-33

The Montenieri-King combination as presented in the rejection of claims 6-8 above has all of the elements of claims 31-33.

In Reference to Claim 34

The Montenieri-King combination does not explicitly teach that the co-operating portion of claim 27 (the horizontal stop block 28) is a convex shape. However, this is a matter of an obvious design choice. It would be obvious to one of ordinary skill in the art to modify the horizontal stop block 28 with a convex shape because convex shapes are easier to mold as they have larger draft angles and are easier to remove from the molding device.

In Reference to Claims 35-36

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claims 35-36.

In Reference to Claim 37

The Montenieri-King combination teaches that the horizontal block portions (28) are a pair that are located opposite one another (28, see figure 8) around the nozzle (25).

In Reference to Claim 38

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claim 38.

In Reference to Claim 40

The Montenieri-King combination as presented in the rejection of claim 1 above has the second portion of the co-operating portion is located on the cap (15, 59, see figure 11).

In Reference to Claims 41-42

The Montenieri-King combination as presented in the rejection of claim 1 above has two internal ribs (55-56, see figure 11) that run the length of the cap (15).

In Reference to Claims 43-45

The Montenieri-King combination as presented in the rejection of claim 1 above has a pin (40) in the cap (15) that penetrates into the nozzle (25) when the cap (15) fits on top of the nozzle (25, see figure 9-10).

In Reference to Claim 46

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claim 46.

In Reference to Claim 47

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claim 47.

In Reference to Claim 48

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claim 48.

In Reference to Claim 49

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claim 49.

In Reference to Claims 50-52 and 54

The Montenieri-King combination as presented in the rejection of claim 1 above teaches the use of cyanoacrylate, which is a curable instant adhesive or glue (col. 1, ll. 5-15).

In Reference to Claim 53

The Montenieri-King combination as presented in the rejection of claim 1 above has all of the elements of claim 53.

11. **Claim 17 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Montenieri in view of King as applied in claim 16, and further in view of US 3,252,446, R.F. Bateman, (Bateman).

Montenieri in view of King as applied in claim 16 has all of the elements of claim 17 except for the first or lower set of ramps is arranged to be clearly visible to a viewer in both an engaged and dis-engaged position. Bateman in figures 1-6 teaches a friction closure that has a ramp (26) that is in contact with a corresponding ramp surface on a removable cap (18, 28, see figure 1 and 5) such that when the ramp is engaged or dis-engaged, the ramp is always in view to a viewer or user. It would be obvious to one of ordinary skill in the art to borrow the teaching of placing the lower ramp on the outside so that is always viewable from Bateman and re-locate the lower ramp and corresponding ramp interacting parts in the cap of Montenieri to the outside so they are always visible because it is critical to the dispenser that the container is fully closed in between uses, otherwise the glue will harden, and the dispenser will be useless.

Response to Arguments

12. Applicant's arguments with respect to claims 1, 4-54 have been considered but are moot in view of the new ground(s) of rejection in response to the applicant's significant amendments.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW BAINBRIDGE whose telephone number is (571)270-3767. The examiner can normally be reached on Monday - Friday 9 AM to 6 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. B./

Examiner, Art Unit 3754

/Kenneth Bomberg/

Primary Examiner, Art Unit 3754